REMARKS

Present Status of the Application

The Office Action dated December 02, 2008 objected the specification for informalities. Claims 1-2, 7 and 39-42 were rejected under 35 U.S.C. 112, first paragraph as the specification does not provide enablement for the peptides having generic peptide formula of SEQ ID NOs. 12, 13 and/or 14. Claims 1, 39 and 41 were rejected under 35 U.S.C. 102(e) as being anticipated by Curtis et al. (USP 7,125,687). Claim 1 was rejected under 35 U.S.C. 103(a) as being unpatentable over Andersen et al. (*Plant. Mol. Biol.* (1992) 19, 193-204).

Claims 1-3 have been amended to provide more descriptions for clarification and for correcting informalities. The specification has been amended for correcting informalities and for clarification purposes. It is believed that the amendments are supported by the original specification and drawings of this application and can overcome the objections. After entering the amendments and considering the following discussions, a notice of allowance is respectfully solicited.

Discussion for the objections

The specification was objected as failing to specify the sub-types of "Hellethionon B" for "the peptides Hellethionon B (BZT)"on page 50, the last paragraph.

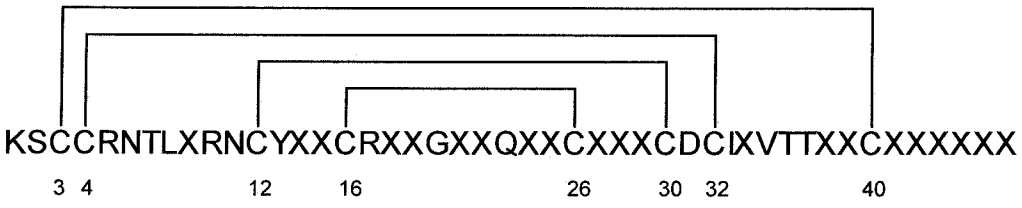
Accordingly, on page 50, last paragraph of the specification, the meaning of the term "BZT" has been amended as "the native and naturally occurring mixture of Hellethionins B1, B2 and B3 in a ratio of about 1:1:1".

Entry of the amendments to the specification and claims is respectfully requested.

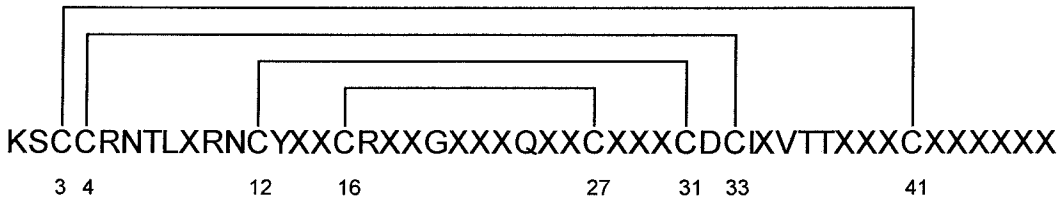
Discussion of 112 rejections

Claims 1-2, 7 and 39-42 were rejected under 35 U.S.C. 112, first paragraph as the specification does not provide enablement for the peptides having generic peptide formula of SEQ ID NOs. 12, 13 and/or 14.

Claim 1 has now been amended to refer only to the isolated cysteine containing peptides having the structure:



(formula I), or



(formula II).

Therefore, the 112 objections for enablement directing to claim 1 are moot.

Accordingly, withdrawal and reconsideration of these 112 rejections are respectfully requested.

Discussions of 102 and 103 rejections

Claims 1, 39 and 41 were rejected under 35 U.S.C. 102(e) as being anticipated by Curtis et al. (USP 7,125,687). Claim 1 was rejected under 35 U.S.C. 103(a) as being unpatentable over Andersen et al. (Plant. Mol. Biol. (1992) 19, 193-204).

Claims 1-3 have been amended to provide more descriptions for clarification and for correcting informalities. Supporting grounds of claim 1 can be found at least on page 10, structures 1 (peptide with 46 amino acids) and structure 3 (peptide with 47 amino acids) of the Description in the specification. Supporting grounds for the amino acid positions 23, 31, 33, 35, 36 and 37 in formula I can be found in dependent claim 2. Supporting grounds for the amino acid positions 1, 2, 5, 6, 7, 8, 10, 11, 13, 17 and 20 in formula I can be found on page 11, lines 1 – 7 of the Description in the specification. Supporting grounds for the amino acid positions 1, 2, 5, 6, 7, 8, 10, 11, 13, 17 and 20 in formula II can be found on page 11, lines 1 – 7 of the

Description in the specification. Supporting grounds for the amino acid positions 32, 34, 36, 37 and 38 in formula II can be found on page 13, last Table, page 14, Tables 1, 3 and 4 and page 15, Table 1 of the Description in the specification.

Since it was known to a skilled person that the Hellethionins have a homology of about 50%, the above cited new general formula (I) & (II) are sufficiently supported by the examples of the description, since the peptides falling under said general formula have also a homology of about 50%. Thus, a skilled person can expect the same biological activity from all peptides falling under the amended general formula.

Concerning the reference Curtis, the disclosed polypeptide of SEQ ID NO:25 (column 5, line 67 and columns 61-66) with the amino acid residues 28-73 does not read on the amended general formula of amended claim 1. The sequence of Curtis does not fall under the amended general formal of amended claim 1, and the Curtis sequence differs at least in amino acid positions 1, 2, 5, 6, 7, 8, 10, 11, 13, 17, 23, 31, 33, 35, 36 and 37, when compared with the amended general formal of amended claim 1. Furthermore, as admitted by the Office Action, the Curtis sequence does not meet the structural limitations of claim 2. Hence, the amended claim 1 patentably distinguishes over Curtis as certain structural features of claim 2 have been incorporated into the amended claim 1.

Regarding the reference Anderson, the sequence cited on page, Fig. 7B of Anderson does no longer fall under the amended general formal of amended claim 1. In particular, when compared with amended claim 1, the sequence of Anderson differs at least in amino acid positions 5, 8, 23, 31, 33, 35, 36 and 37. Hence, the Anderson sequence is **not** an obvious

variant of the instant peptides as claimed in amended claim 1.

According, reconsideration and withdrawn of these 102 and 103 rejections are respectfully requested.

CONCLUSION

For at least the foregoing reasons, it is believed that the pending claims 1-3, 7 and 39-42 of the present application patently defines over the prior art and are in proper condition for allowance. If the Examiner believes that a telephone conference would expedite the examination of the above-identified patent application, the Examiner is invited to call the undersigned.

Respectfully submitted,
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